Main Directions and Didactic Principles of Using Multimedia Electronic Resources in a Pedagogical University

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ABSTRACT

Currently, the main attention in the field of informatization of education is focused on the problems of creating and using effective multimedia electronic resources. To achieve the completeness and quality of the use of scientific and practical knowledge in the educational activities of pedagogical institutions, it is necessary to create an effective information support system. The article discusses the main directions and didactic principles of using multimedia electronic resources in the system of teacher education.

KEYWORDS: *multimedia electronic resources, main directions of using new multimedia electronic resources, unified information environment, didactic principles of using new multimedia electronic resources, educational sites.*

Multimedia technologies enrich the learning process; make learning more effective, involving most of the student's sensory components in the process of perceiving educational information.

Today, multimedia technologies are one of the promising areas of informatization of the educational process. The improvement of software and methodological support, the material base, as well as the mandatory advanced training of the teaching staff, sees the prospect of the successful application of modern information technologies in education.

In a dynamically changing world, constant improvement and sophistication of technologies, informatization of the education sector is of fundamental importance. This direction of development of the educational industry, as emphasized in government documents, is recognized as the most important national priority. Thanks to modernization in education, the role of multimedia electronic resources is increasingly manifesting itself not only in the system of teacher education, which quite recently could only be observed as a point experience.

According to the directions of using multimedia electronic resources in the system of activity of pedagogical educational institutions, it can be divided into:

➢ the use of multimedia electronic resources in the organization of the educational process with students;

➢ the use of multimedia electronic resources in the process of interaction of the teacher with students;

➢ The use of multimedia electronic resources in the process and organization of methodological work with teaching staff.

The main directions of using new multimedia electronic resources in the educational process are:

➢ The direction that is used to present new material. Demonstration and encyclopedic programs, computer presentations can be used in this direction.

➢ A direction that aims to conduct experimental work with the use of multimedia.

➢ Direction when fixing the stated material. This is the use of a variety of training programs and laboratory work.

➢ The direction used for control and verification. These include testing with evaluation and monitoring programs.

For the successful creation of a unified information environment of a pedagogical educational institution, for the use of multimedia electronic resources, the following conditions must be met:

➢ to equip all blocks of the information space with computers;

➢ provide motivation for the use of information systems for each of the performers in their area;

➢ ensure the professional development of teachers in the field of information technology;

➢ divide the entire amount of information by performers;

➢ organize a local network;

➢ equip a multimedia room;

➢ provide free access to the Internet;

➢ To organize the exchange of experience within the educational institution.

A computer, multimedia tools are tools for processing information that can become a powerful technical learning tool, a communication tool necessary for the joint activities of teachers and students.

Informatization of pedagogical education opens up new opportunities for teachers to widely introduce new methodological developments into pedagogical practice aimed at intensifying and implementing innovative ideas of the educational process.

In teaching activities in working with students, you can use various means: a computer, laptop, interactive whiteboard, printer, scanner, TV, video, DVD, CD, music center, digital camera, video camera.

The use of multimedia electronic resources in the teaching and development of students provides ample opportunities for communication and obtaining a variety of modern information.

The use of multimedia electronic resources in working with students requires compliance with certain didactic principles:

✓ the principle of activity (novelty, dynamism, reality, stimulation

✓ cognitive activity);

✓ the principle of scientific character, the use of animation effects (the assimilation of real knowledge, not distorted information materials - sound recording, photographs, pictures);

✓ the principle of accessibility (the material corresponds to the level of the age group, the specifics of children and their diagnoses are taken into account);

✓ the principle of systematicity and consistency (material and information is provided in a certain order in accordance with the planning of activities with students;

✓ The principle of visibility (multimedia presentations, video clips, slide shows).

A modern multimedia electronic resource has innovative qualities due to the use of new pedagogical tools, the list of which includes:

➢ Interactive. The content of the subject area is represented by learning objects that can be manipulated and processes that can be interfered with. Interactive makes it possible to influence and receive responses.

➢ Multimedia. Multimedia provides a realistic representation of objects and processes.

➢ Modeling - simulation modeling with audiovisual reflection of changes in the essence, type, qualities of objects and processes, giving an adequate representation of a fragment of the real or imaginary world. Modeling implements the reactions characteristic of the objects under study and the processes under study.

➢ Communicativeness - the possibility of direct communication, the efficiency of information presentation, remote control of the process status.

➢ User productivity. Thanks to the automation of non-creative operations of searching for the necessary information, the creative component and, accordingly, the effectiveness of educational activities increase dramatically.

The use of multimedia electronic resources in pedagogical activity is not even a novelty, but a necessity for working with students, in methodological, experimental and innovative activities, and, finally, assistance in the teacher's self-education. A single information space is being created in an educational institution. The teacher has the opportunity to get acquainted with the best practices and best practices of other teachers.

Many magazines have an electronic version on the Internet, and the teacher can use the necessary materials for their intended purpose.

Using multimedia electronic resources in the work, the teacher carries out and solves the important tasks of the development of a preschooler in modern society, contributes to the development of a successful personality, as he is a guide to the world of innovation. ICT is a means of interactive learning that allows you to stimulate the cognitive activity of students and participate in the development of new knowledge.

The use of this type of equipment involves a group form of work with students and significantly reduces the risk of various types of fatigue. The duration of classes can be increased by 2-3 times compared to working at personal computers. This type of organization of classes is close to traditional learning. All students' attention is focused on the teacher, who demonstrates the lesson materials with the help of a projector. These can be visual aids, videos, application software snippets, etc.

An interactive whiteboard performs all the same functions as a projector with a screen, only the specific features of the software supplied with the device are added to them. There are many types of interactive whiteboards, and each has its own software.

 However, most of them have similar features:

✓ "smart pen", which converts objects drawn by hand into regular shapes;

✓ curtain that allows you to hide part of the screen;

- ✓ "photo screen" function, which allows you to take a picture of the entire screen or a selected part when watching a video, working on the Internet;

- ✓ text recognition function that allows handwritten words to be converted into printable characters;

- ✓ collections of images;

- ✓ stopwatch;

- ✓ the ability to move objects in the interactive whiteboard space;

- ✓ The ability to apply annotations on top of any programs, documents, videos.

To work with educational material in an interactive mode, the following equipment is required: a computer, a projector and an interactive whiteboard. As educational material, you can use presentations, videos, flash animation, application software.

For many educators to this day, books and periodicals are the main sources of this or that information. Sometimes the teacher spends most of his time searching for the necessary information, turning over a huge number of pages, looking through piles of literature. With the advent of multimedia electronic resources and the Internet in our lives, we can optimize our work, including the field of information retrieval. The Internet makes it possible to widely use the texts of works of art, watching cartoons or certain fragments.

Teachers have the opportunity to accumulate material, communicate professionally on the Internet, share their experience, improve self-education, use university websites to interact with students. The main aspect in the website of the university is the creation of conditions for independent work of the student with the provision of free access to various information resources on the Internet and on various sites and portals of the country and other universities, as well as the introduction of network technologies in their university.

The creation of educational sites at each department of the university to solve organizational issues and improve the scientific and methodological support of the educational process will change the attitude towards the learning process and will contribute to the introduction of computer and distance learning technologies.

It is impossible to consider multimedia electronic resources only as new educational opportunities. They develop new skills and abilities. Students have the opportunity to use other materials for lesson preparation and self-study. It is the educational process, with the use of multimedia electronic resources that changes the student. The results of the process are expressed in the achievements (educational and personal) of the student. First of all, it is not the process of acquiring new knowledge, but the process of forming new skills and abilities. It is on this result that lessons should be oriented using multimedia electronic resources.

The use of multimedia electronic resources in the field of teacher education will allow teachers to qualitatively change the content, methods and organizational forms of education, while improving the tools of pedagogical activity, increasing the quality and effectiveness of education.

Thus, in order to improve the quality of education, the student must have access to detailed and carefully structured educational and methodological materials so that he can easily navigate the material and choose an acceptable educational strategy.

For a better understanding of the topics studied, it is necessary to have a sufficient number of illustrative examples, implemented, including with the help of multimedia electronic resources, which allow you to simultaneously influence several senses and therefore arouse increased interest and attention among users.

The use of multimedia electronic resources in teacher education contributes to improving the quality of the educational and upbringing process. Students receive up-to-date knowledge, learn to use modern equipment.

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